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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/431,703	11/01/1999	STEVEN W. BROWN	APPL-P2822	9101
7590	06/18/2004		EXAMINER	
JONATHAN VELASCO SIERRA PATENT GROUP LTD P O BOX 6149 STATELINE, NV 89449			PARK, ILWOO	
			ART UNIT	PAPER NUMBER
			2182	
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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/431,703	BROWN, STEVEN W. 
	Examiner Ilwoo, Park	Art Unit 2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 15 April 2004.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 10-31 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 10-31 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/15/2004 has been entered.
2. Claims 1-9 are canceled and claims 10-31 are presented for examination.
3. Shima et al and Levy et al were cited as prior art in the previous office action.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 10-13, 15-17, 21-24, and 26-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Shima et al., US patent No. 6,446,142.

As to claims 10 and 21, Shima et al teach a method for providing a transaction layer [fig. 1] for a module having at least one node connected to a serial bus [IEEE 1394 serial bus] that configures a link device for each of said at least one nodes comprising:

detecting [col. 3, lines 13-22 and col. 3, lines 34-40] a link driver;  
receiving [col. 3, lines 13-20; col. 3, lines 38-40; col. 3, lines 61-63] capabilities  
[col. 3, lines 13-20; col. 5, lines 27-30] of said link driver;  
generating [col. 3, lines 41-42; col. 4, lines 1-31] a link driver configuration  
[object] for said link driver from said capabilities of said driver; and  
loading [col. 3, lines 22-37; col. 4, lines 1-31; col. 5, lines 41-47] said link driver  
configuration into said link driver.

6. As to claims 11 and 22, Shima et al teach querying [col. 6, lines 21-25] said link  
driver for said capabilities.

7. As to claims 12 and 23, Shima et al teach receiving said capabilities of said link  
driver from said link driver [col. 4, lines 7-9; col. 4, lines 21-23].

8. As to claims 13 and 24, Shima et al teach storing said capabilities of said link  
driver [col. 4, lines 18-19].

9. As to claims 15 and 26, Shima et al teach receiving configuration information for  
said link driver [col. 4, lines 7-9; col. 4, lines 21-23].

10. As to claims 16 and 27, Shima et al teach generating said link driver  
configuration from [col. 4, lines 7-9; col. 4, lines 21-23] said capabilities and said  
configuration information.

11. As to claims 17 and 28, Shima et al teach storing said configuration data [col. 4,  
lines 18-19].

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 14, 18, 25, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shima et al., US patent No. 6,446,142.

As to claims 14, 18, 25, and 29, Shima et al teach generating a node in a list for said link driver and storing said capabilities of said link driver in a data field of said node. Shima et al do not show the list is in a form of linked list. However, Shima et al teach a linked list form [P1394 standard draft 8.0v2 in col. 1, lines 15-20 disclosing a configuration ROM storing entries for node capabilities within a root directory providing a pointer to another directory which has same structure as the root directory].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a form of linked list for storing said capabilities for easiness of managing a node by a pointer [col. 6, lines 15-20].

14. Claims 19, 20, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shima et al., US patent No. 6,446,142 in view of Levy et al., US patent No. 6,212,633.

As to claims 19, 20, 30, and 31, Shima et al. do not disclose receiving an input of user defined configuration data for a link driver.

Levy et al teach a method for configuring a link device of a P1394 serial bus based on capabilities [col. 9, lines 10-26] of a link driver and an input of user defined configuration data received [col. 10, lines 43-55].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Shima et al and Levy et al because they both teach configuring a link device of a P1394 serial bus based on capabilities and Levy et al's teaching of receiving an input of user defined configuration data for a link driver would increase flexibility/user friendliness in dynamically configuring a link device of Shima et al.

### ***Response to Arguments***

15. Applicant's arguments filed 10/10/2003 have been fully considered but they are not persuasive.

Applicant argues that equating a link driver and a device driver is inaccurate when link drivers and device drivers are functionally different. For this point, Shima et al teach a plurality of devices [see fig. 2] conforming to IEEE 1394-1995 standard. Specifically, an appropriate device driver corresponding with a device of a plurality of devices should be identified and loaded in the processor [CPU 42 in fig. 3] in order to point-to-point communicate with each other [col. 3, lines 20-22] while the device of the IEEE 1394-1995 standard is supporting a link layer [fig. 1]. Thus, the device driver of the device supporting the link layer includes a link driver.

Further, A) for a point that Shima does at least not suggest detecting a link driver:

Without citing of Applicant Admitted Prior Art describing, "During initialization (startup) of a module, certain hardware devices of the module are checked and appropriate drivers are loaded as is known in the art." in page 2, lines 13-14 of the Specification and further citing of prior art, each link driver is loaded in order to communicate with an associated device in accordance with the IEEE 1394-1995 standard. For example, as seen in Shima, in order to communicate [col. 3, lines 13-22; col. 3, lines 38-40] with the new device [col. 3, lines 13-22], an appropriate driver of the device should be searched, found, or detected and loaded.

B) For a point that Shima does not suggest receiving capabilities of the link driver:

According to the IEEE 1394-1995 standard, capabilities are stored in the configuration ROM in a device. Shima teaches firstly, receiving capabilities of the link driver associated with the device by the link driver accessing the configuration ROM of the device in order to generate [col. 3, lines 38-42] an object representing [col. 3, lines 15-16; col. 5, lines 27-30] the capabilities of the device, secondly, receiving capabilities [objects from a library for reconfiguring object: col. 3, lines 13-20] of the link driver associated with the device having resident subunits, and thirdly, receiving capabilities [retrieved subobjects: col. 3, lines 58-61] of the link driver associated with the device having resident subunits.

C) For a point that Shima does not suggest generating a link driver configuration for the link driver from the capabilities received:

Shima teaches firstly, generating [col. 3, lines 38-42] a link driver configuration [object representing capabilities of the device: col. 3, lines 15-16] for the link driver from the capabilities received and secondly, generating [col. 4, lines 1-10] a link driver configuration [object assembled from retrieved subobjects representing capabilities of resident subunits] for the link driver from the capabilities received.

D) For a point that Shima does not suggest loading link driver configuration into the link driver:

The link driver configuration should be loaded into the link driver to reflect or reconfigure the bus changes or updates [col. 3, lines 22-37; col. 5, lines 41-47] so that the link driver is able to access the device with the capabilities determined [col. 4, lines 1-10].

### ***Conclusion***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ilwoo Park whose telephone number is (703) 308-7811. The examiner can normally be reached on Monday through Friday from 9:00 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A Gaffin can be reached on (703) 308-3301. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Hand-delivered responses should be brought to US Patent and Trademark  
Office, 2011 South Clark Place, Customer Window, Crystal Plaza Two, Lobby, Room  
1B03, Arlington, VA 22202.



Ilwoo Park

Primary Examiner

June 12, 2004